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Patient satisfaction evaluation has been an impetus for quality improvements throughout the U.S. health care system. The United States Coast Guard (CG), an armed military service, operates 42 ambulatory clinics throughout the nation and abroad. The CG patient satisfaction system consists of 42 unique assessment approaches. The diversity of evaluation processes makes measurement challenging and limits improvement efforts. This paper evaluates CG organizational demands, describes CG practice landscape, presents standards, reviews initial clinic process analysis, and evaluates the cost and criteria of proposed policy alternatives. The findings of this research, concludes that the CG should standardized the evaluation of patient satisfaction by implementing the American Medical Group Association's (AMGA) Survey program.

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A Policy Analysis of the Coast Guard's Existing Patient Satisfaction System and Recommendations for Improvement

Presented to LT Suzanne J. Wood, PhD

In partial fulfillment of the requirements for
HCA 5661 - Administrative Residency

By
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Abstract

Patient satisfaction evaluation has been an impetus for quality improvements throughout the U.S. health care system. The United States Coast Guard (CG), an armed military service, operates 42 ambulatory clinics throughout the nation and abroad. Because timely and effective health care is the foundation for the military personnel readiness, quality CG clinic operations is imperative. However, the CG patient satisfaction system consists of 42 unique assessment approaches. The diversity of evaluation processes makes measurement challenging and limits improvement efforts. This paper evaluates CG organizational demands, describes CG practice landscape, presents standards, reviews initial clinic process analysis, and evaluates the cost and criteria of proposed policy alternatives, with the intent of providing recommendations for improvements. The findings of this research concludes that the CG should standardized the evaluation of patient satisfaction by implementing the American Medical Group Association's (AMGA) Survey program.

Disclaimer

The opinions expressed in this paper are those of the author and are not to be construed as reflecting the official policy or position of Baylor University, U.S. Army Medical Command, U.S. Coast Guard, Department of Homeland Security, Department of the Army, Department of Defense, or the U.S. Government.

Ethical Considerations

No personal identifying information was captured during this study. The author declares no conflict of interest or financial interest in the adoption of any surveys or services mentioned in this paper.

Introduction

Problem

The Coast Guard (CG) operates 42 healthcare clinics throughout the United States and Puerto Rico. The policy that directs CG clinics to evaluate patient satisfaction lacks vision, clear constructs, and control mechanisms. As a result, each clinic administrator is responsible to design, distribute, retrieve, assess, and apply patient satisfaction results individually.

The current policy provides flexibility of processes, as each clinic can readily pursue analysis addressing local care delivery concerns. However, with 42 clinics in the CG, there are 42 different ways to assess patient satisfaction. With few procedures in place and undefined measurement methods, variations in the form and content of tools that evaluate patient satisfaction in the CG clinics are evident. Unfortunately, variation of surveys leads to variations in outputs, impeding the benchmarking or comparison of scores. In addition, the application of evidence-based surveys is sporadic. Clinic administrators lack the technical ability and resources to design and implement valid measurement tools, thus limiting quality improvements at each facility. Furthermore, scores from a wide range of instruments are ill suited to provide systematic feedback that would improve health care system as a whole. In

the absence of an enterprise-wide metric for patient satisfaction, the CG lacks the ability to measure and monitor change in the delivery of care throughout the organization.

This study consisted of the defining of the CG processes, the identification of desired evaluation dimensions, and the evaluation of two alternative policies. The evaluation consisted of a cost and criteria evaluation which culminated in a Policy Analysis Scorecard (p. 65). Questions answered in this research include: What are the requirements of an effective policy that support the evaluation of patient satisfaction? How does the CG system match up to these requirements? And, how might the CG, as an organization, improve the organizations processes?

The extent to which the CG policy reflects best practices and supporting literature was substantiated as the Status Quo. These findings provide a baseline for current CG patient satisfaction evaluation processes. Benchmarking two alternative policies against the CG baseline provides a systematic policy analysis and should provide a context for developing a more robust patient feedback process within the CG.

The U.S. Coast Guard

The CG is the smallest branch of the U.S. armed forces and is the principal federal agency for providing maritime security. Its 41,000 active duty members protect 95,000 miles of the U.S. coast line (GAO, 2006; Justice & Nimmich, 2006). In 2002, as a result of the disaster at the World Trade Center on September 11, 2001, the CG command was reassigned from the Department of

Transportation to the newly formed Department of Homeland Security (DHS). Despite the demands of the Homeland Security mission, many of the CG traditional missions remained, including: the protection of marine environments, drug enforcement, migrant interdiction, marine safety, waterway management, defense support, and search and rescue operations. These multi-mission obligations required the CG organization to adapt. Since 2001, the CG increased its active duty strength by 10%, involuntarily activated over 4,000 reservists, increased number of deployed personnel, and increased work week hours (GAO, 2006; Justice & Nimmich, 2006; USCG Reservist Magazine, 2003). All of these initiatives have increased the demand for health care by CG clinics.

Delivery of Health Care in the CG

The CG remains the only branch of the armed services not commanded by the Department of Defense (DOD). TRICARE is the Department of Defense's worldwide managed care program for active duty and retired uniformed service members and their families, and survivors. The Military Health System (MHS) is the military component of the TRICARE health management system. The MHS consists of the internal delivery of care provided by Army, Navy, and Air Force health care facilities and providers whose primary mission is to ensure the nation has available a healthy fighting force. The MHS supports combat readiness and provides a cost effective, quality health benefit to active duty members,

retirees, survivors and their families. Because the CG is not part of the DOD, the administration of CG clinics does not fall under TRICARE, so many administration tools present in the MHS are not applied to the CG health care system.

In the CG, the delivery system consists of 42 ambulatory clinics in 21 states and Puerto Rico. Primarily, these clinics provide dental, pharmacy, and primary care services, and can range from one to ten providers. Many of the larger clinics offer specialty services, such as the CG Academy Clinic, which provides mental health counseling. In addition, the smaller clinics are introducing more specialty care services as patient needs arise.

Health care delivery at CG clinics is primarily focused on the readiness of CG personnel serving on active duty. Some DOD personnel, dependents, retirees, and retiree dependents are treated at CG clinics. Due to limited resources, treating patients other than active duty CG members occurs only when space permits.

To optimize delivery as well as accountability, CG personnel are limited in their selection of health care providers. If location is not a factor, CG personnel on active duty must first seek care in a CG clinic. The scope of services offered at CG clinics is limited. Thus CG patients seeking specialty care must access the MHS by visiting DOD Military Treatment Facilities (MTFs), if such a facility exists within a defined radius (i.e., an hour's drive). If an MTF is not accessible, the CG member will receive services from a TRICARE-approved provider.

If a CG clinic is not available for primary care, and CG personnel are within an hour's drive from a DOD MTF, the CG member must enroll as a DOD MTF beneficiary. However, many CG personnel serve in remote areas which lack CG or DOD health care services. Personnel are then assigned to TRICARE network providers in the civilian sector. Regular and routine care in rural settings may be limited, but is usually not problematic. However, CG physicals related to military readiness are not supported by civilian providers, requiring personnel to travel to CG clinics or DOD MTFs for evaluation.

Efficiency of care in the CG is imperative. Training, as well as mission obligations, must be balanced in relation to care delivery. CG daily operations require unit deployments. Remote CG units are manned efficiently, with each person assigned to the unit deemed essential. If one member of the team is unavailable due to medical treatment needs, the team maybe prevented from deploying, limiting mission capability. Thus, accessing immediate, effective health care services is essential.

Supporting the rise in health care demand, the CG has increased the number of its health care services adding a clinic in St. Petersburg, FL (2005) and a clinic in San Diego (2006). Additionally, the CG as has also increased its association with the MHS, adding CG providers to DOD MTF facilities. For example, CG clinic personnel in Hawaii were reassigned from the CG base to the Tripler Army Medical Center.

According to CG Headquarters (LT T. Kulzer, personal communication, January, 2006), providers employed at CG clinics

include Public Health Service (PHS) personnel (160+), CG physician assistants (30+), and contract providers (60+). Addressing a reported shortage of over 30 PHS providers in 2006, and in response to the increasing need for specialty services, the use of contract providers has increased at CG clinics. As a result, CG clinic administrators report service quality issues in managing care due to limited availability of PHS providers, heavier use of short-term contract providers, and excessive turnover.

In addition, the CG responded to elevated demand on its health care delivery system by extending the capabilities of its volunteer corps, the CG Auxiliary. CG Auxiliary personnel have served as CG providers since 1999, but services were initially limited. Because readiness requirements increased post 9-11, CG Headquarters authorized the broadening of Auxiliary provider credentialing as a means to assist in care delivery at CG clinics (U.S. Coast Guard, 2005).

Concern with the escalating cost of services associated with medical care for the CG has also led to increased oversight. Lieutenant Commander (LCDR) Turner, in a report presented at the MHS Conference (2007), approximately 8% of the 2006 CG budget has been allocated for the provision of health care. He estimates that 2% of the budget supports internal health care services, while the remaining 6% supports DOD/TRICARE expenditures. LCDR Turner predicts that the increasing costs of CG health care will outpace other CG expenditures over the next 10-15 years. He also predicts that as more funding is required to support the delivery

of health care within the CG, internal requirements for accountability will heighten. His recommendation to CG health services personnel is simply to become more efficient at delivering care.

Evaluating Patient Satisfaction in the CG

Clinic administrators who manage CG clinics are active duty personnel who answer directly to CG commanders responsible for regional front-line operations. Clinic alignment to operational forces reduces the influence of the medical chain-of-command within the organization, allowing each CG clinic to operate independently, and creating diversity in structure, process, and outcomes. Unfortunately, the competencies required to be a CG clinic administrator are ill-defined. For example, there is no specific or required skill set. A senior chief, warrant officer, lieutenant, or lieutenant commander could serve as clinic administrator. This experiential and educational diversity results in different management styles and variations in clinic operations. More specifically, the application of administrative tools, such as the evaluation of patient satisfaction, remains erratic.

Within the CG, the evaluation of patient satisfaction through surveys is one of three formal ways for providing feedback. Patient advisory committees and clinic certification comprise the other two. Scores from patient satisfaction surveys are submitted to local patient advisory committees for review. In addition, the process of evaluating patient satisfaction for each clinic is reviewed during accreditation visits, which occur

approximately every three years.

In 2005, the CG signed an agreement with the Association for Accreditation of Ambulatory Health Clinics (AAAHC) to accredit all CG clinics. Accreditation standards, as outlined by the AAAHC, state that clinics must evaluate patient satisfaction. AAAHC further requires survey results be comparable, although the organization neglects to define *comparable*. As a result interpretation of accreditation standards remains problematic.

Provisions in the CG's Medical Manual (2005) require clinics to evaluate patient satisfaction. Chapter 13.M of CG Medical Manual requires clinics to survey patient satisfaction annually. Surveys must also be available for patient input throughout the year. The manual, however, does not specify the use of a particular survey, nor does it dictate content, survey methodology, data analysis or application. The CG medical manual simply states, "A local form is authorized for use" (p. 2).

CG medical command is interested in whether the assessment of patient satisfaction is being accomplished; however, specific levels of patient satisfaction, changes in patient satisfaction, and quality improvements generated from patient satisfaction results are of little interest (CG Clinic Administrators, personal communication, December 2006). Oversight of patient satisfaction by Maintenance Logistics Center Pacific Area (MLCPAC) is representative of this. The medical chain of command at MLCPAC requires notification of clinic scores only when there is a negative score. Defining what constitutes a negative score

is ambiguous, leaving clinic administrators to determine whether or not a score is negative. Consequently, reporting a clinic's negative score may indicate adverse performance. The process is flawed in that negative reporting serves as a disincentive to providing straightforward feedback. Absence of oversight further supports an under-reporting environment.

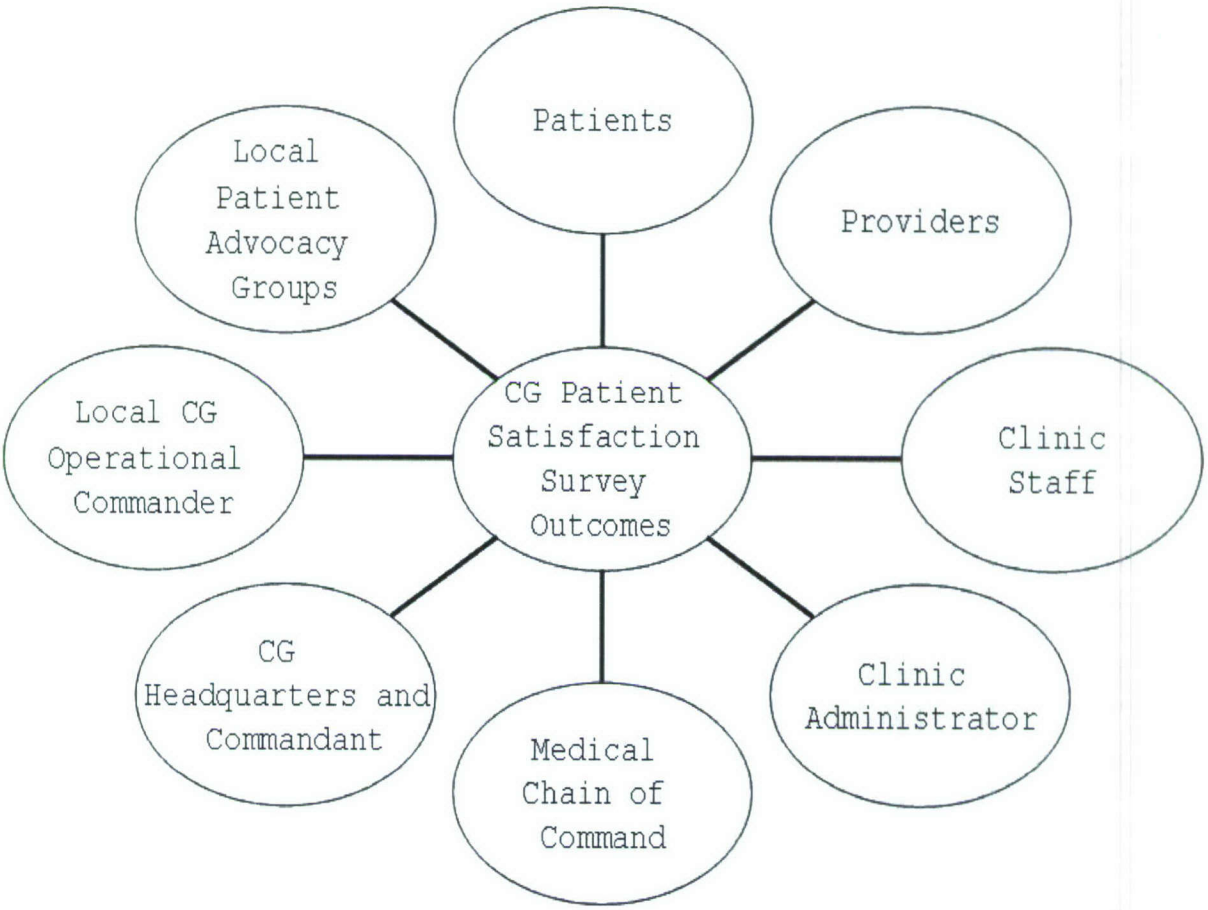
Because clinics operate independently and the process for determining patient satisfaction is idiosyncratically defined, each clinic's system is unique. In the absence of common structure and process controls, assessing patient satisfaction is problematic at best. However, the new commandant has called for reorganization of CG support commands, including the health care system. Currently under review is the strengthening of the medical chain of command in the CG. If oversight responsibilities of the CG medical command are strengthened, an opportunity exists to evaluate the patient satisfaction survey process.

Despite the differences in the evaluation of patient satisfaction, the stakeholders of CG health care policy remain constant. Defining the stakeholders helps bound the policy analysis. A stakeholder analysis is an important visual tool because it provides an organization a more holistic view of actions and conditions under consideration (Swayne, Duncan, & Ginter, 2006). An analysis further supports the evaluation of the different proposed policies in relation to current environmental conditions.

This analysis was conducted using a policy review and interviews with CG clinic administrators and headquarter commands. Questions considered during the analysis of stakeholders included: *Who is affected by patient satisfaction in CG clinics? Who supports the process of assessing patient satisfaction? And who is responsible for the patient satisfaction survey process?* The stakeholder analysis was broken down into external and internal components to identify important variables and interrelationships that may affect decision-making (Swayne, Duncan, & Ginter, 2006).

Identifying internal stakeholders established process responsibilities and communicated the diverse needs of groups within the organization. The internal analysis revealed eight key stakeholders (Figure 1). Six of the stakeholders have an active role in the evaluation and application of the scores. The other two entities CG Headquarters and the health care chain of command maintain a passive role in survey distribution and the application of results. This policy analysis evaluated strengthening these two stakeholders association with the implementation of a standard instrument applied throughout the organization.

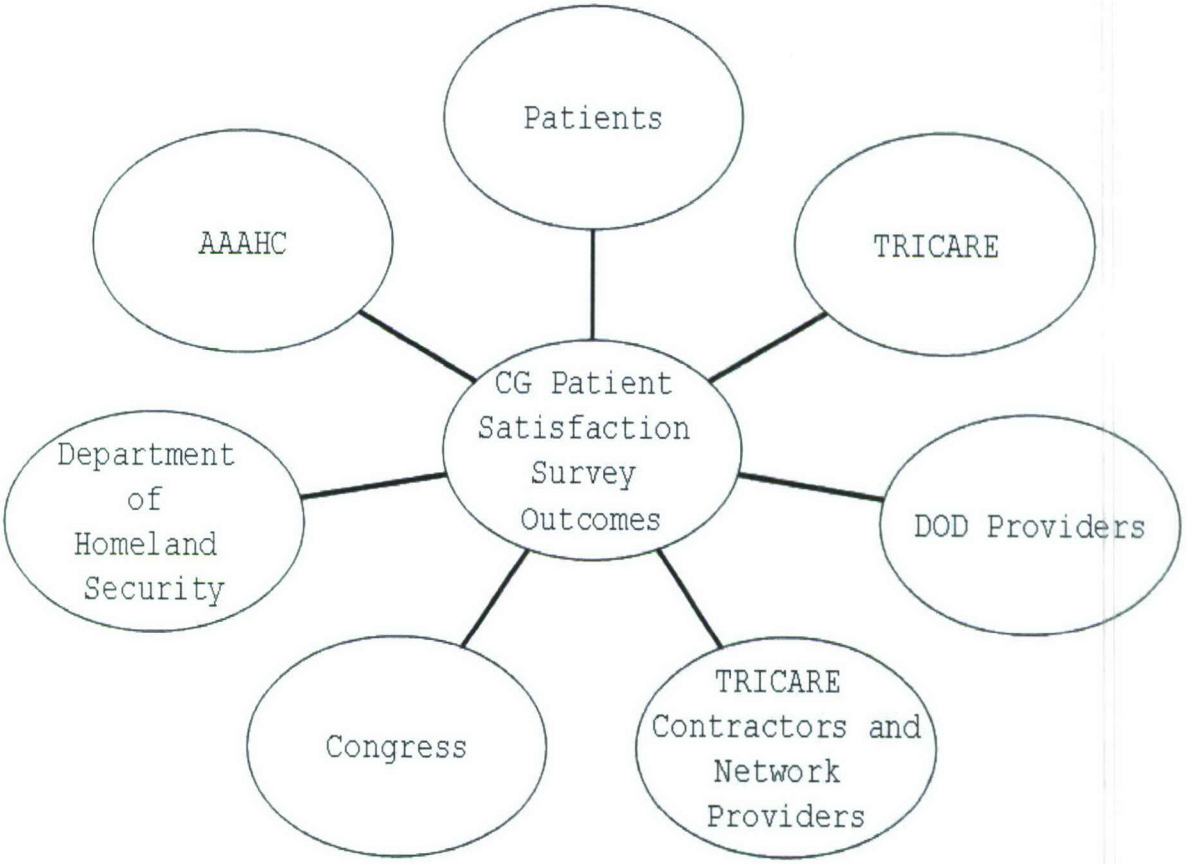
Figure 1. Internal stakeholder analysis.



Complementing the internal stakeholder analysis, an external stakeholder analysis is included (see Figure 2). Because some active duty service members other than CG may be seen at CG facilities, patients are included in both internal and external stakeholder analyses. The AAAHC, through certification, is the only other external stakeholder that may interface with the CG patient satisfaction process. Subsequently, the stakeholder analysis revealed that the current evaluation process limits direct interaction with many of the external stakeholders. A more

formalized evaluation system provides additional opportunities for improved communication with external stakeholders.

Figure 2. External stakeholder analysis.



Evidence

In the 2001 landmark report *Crossing the Quality Chasm: A New Health System for the 21st Century*, the Institute of Medicine (IOM) identified the need for fundamental changes in the organization and delivery of health care in the United States. Furthermore, the IOM asserted that patient satisfaction surveys that accurately assessed patient care could help improve

quality. The IOM endorsed Lohr's definition of *quality*: "The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge" (p. 232).

Despite the IOM's call for fundamental change that emphasized patient-centered care and patient satisfaction, the CG's evaluation of patient satisfaction remained stagnant. In addition, post 9-11 requirements dictated internal changes to care delivery devoid of metrics to evaluate the effects on patients. In the commercial world of health care delivery, patient satisfaction is valued. Patients are consumers; those dissatisfied with care may receive treatment elsewhere, which potentially affects the financial well-being of particular practices (Press, 2006).

Influencing patient choice is not the only reason for evaluating patient satisfaction. Orlando and Meredith (2002) report high patient satisfaction is significantly and positively related to high quality care. Patients with higher satisfaction express more confidence and trust in their providers. Trust results in greater willingness to disclose symptoms, which increases the doctors' opportunities to provide effective care (Orlando & Meredith). Other researchers also report a significant correlation between patient satisfaction and high-quality outcomes and the delivery of efficient health care (Alazri & Neal, 2003; IOM, 2001; Ransom, Joshi, & Nash, 2005). Additionally, Alazri and Neal (2003) report a significant

positive association between patient satisfaction, improved staff culture, and cost savings.

Patient satisfaction surveys provide a patient-based measure that addresses non-technical aspects of health care (IOM, 2001; Press, 2006). Furthermore, Drain and Clark (2004) assert surveying patient satisfaction is good practice because, "A patient centered organization is committed to affirming patients' perceptions as their reality and improving the way patients experience care in the future" (p. 2).

Research in the Military

The DOD has completed several patient satisfaction studies; however, none have evaluated care at CG clinics. Yet, many findings may be applied in CG settings. Concurring with civilian research, DOD findings support the notion that patient satisfaction is an indicator of health care quality (Jackson & Kroenke, 1997; Manglesdorff & Finstuen, 2003; Manglesdorff, Finstuen, Larsen, & Weinberg, 2005). Additional studies have validated the use of patient satisfaction results because high ratings of patient satisfaction in military facilities correlate with increased military readiness and regimen compliance, continuation of care, and lower health care costs (Alazri & Neal, 2003; Fan, Burman, McDonnell & Fihn, 2005; Hulka, Cassel, Kupper, & Burdette 1976).

As managed care became the predominant MHS model, the 1993 National Defense Authorization Act (NDAA) mandated that the armed services establish a formal evaluation process to assess patient satisfaction. In response, the DOD established several

different surveys. The principal means for providing health care was increasing influenced by managed care throughout the 1990s. As a result, new concerns arose regarding the adequacy of care, and in 1998, Congress mandated a review of collecting patient feedback. The Government Accountability Office (GAO) conducted a study entitled, "Defense Health Care: DOD Could Improve Its Beneficiary Feedback Approaches". The report cited that a lack of standards for evaluations prevented systematic reporting, as each MTF assessed had "differing ways of obtaining, documenting, and analyzing beneficiary-imitated feedback systems" (GAO, 1998, p.13). The findings of this report pushed the DOD to standardize the evaluation of surveys, which supported the transition of the MHS to be a more outcomes-oriented system of care.

Standard Survey Best Practices

One standard survey used by the DOD is the Health Care Survey of DOD Beneficiaries (HCSDB). This survey is based on the original Consumer Assessment of Health Plans Survey (CAHPS). The CAHPS program was developed by the Agency for Healthcare Research and Quality (AHRQ) in conjunction with the Centers for Medicare and Medicaid Services and the U.S. Department of Health and Human Services "to develop a national standard for assessing patient experiences of hospital care in the United States" (Drain & Clark, 2004, p. 1). Because CAHPS surveys are widely used, the results allow for benchmark comparisons with scores from civilian care facilities. The Medical Management Guide

(2006) published by DOD supports the comparing of scores and defines *benchmarking* as "the continuous process of measuring process, services, and practices against industry standards to compare performance and gauge where and whether efforts to improve might be indicated" (p. VI.8). The results of HCSDB surveys encourage MTFs to analyze trends quarterly and allows for benchmarking among DOD and commercial facilities.

The HCSDB survey requires respondents to answer 90+ questions consisting of core content that changes little from year to year, and includes supplementary material that is updated quarterly. Supplementary questions allow the analysis of specific concerns; for example, responses may include feedback regarding patients' perceptions of health care delivery following base realignment and closure. This query is pertinent for assessing perceptions related to time-specific access.

The HCSDB results are available on TRICARE's Website (www.tricare.osd.mil) and include ratings of health care plans, personal provider ratings, and specialist ratings. Results are aggregated by DOD service categories so that the Army, Air Force, and Navy may identify data trends. Data, however, are not aggregated for the CG. According Dr. Williams, Director, Center for Health Care Management Studies, TRICARE Management Office (personal communication, April 2007), analysis of CG data is not

included because of the relatively few numbers of CG patients sampled.

Similar to the DOD, the VA has also established standard surveys to evaluate organizational care delivery. However, the evaluation of patient satisfaction in the VA in the early 1990s lacked cohesion. Like the CG of today, the VA permitted each local facility to monitor patient satisfaction with minimal oversight (Humble, Schafer, & Fleming, 2004). According to Humble, Schafer, and Fleming (2004),

> Though these local surveys may have been adequate for quality improvement purposes, they were usually side-duty of staff inexperienced in survey methods and statistical analysis. Without a standard system-wide process, it wasn't possible to develop a national data and compare facility scores across the system. (p. 1)

Transition to standard surveys for the organization came in 1995 when the VA conducted its first nationwide patient satisfaction survey. Soon, the assessment by individual facilities became obsolete, and standardized tools with strategic intent were adopted.

In 2002, the VA began using the Survey of Healthcare Experiences of Patients [SHEP] (VA Form 10-1454-3) throughout the organization as a gauge for measuring patient satisfaction and clinic expectations. SHEP was developed by using focus

groups and Picker Institute research. SHEP serves both as a means for quality improvement and as a performance measure (Humble, Schaefer, & Fleming, 2004). According to the VA (2007), the SHEP requires approximately 30 minutes to complete and consists of 107 items. The SHEP survey is distributed via mail to patients of the 800 outpatient VA clinics. Results are posted on the VA Website.

SHEP addresses the following standards of health (Humble, Schaefer, & Fleming, 2004, p. 4):

- Provide timely access to health care
- Treat patients with courtesy and respect
- Support patient's emotional needs
- Provide information and education about condition, treatments and tests
- Have one provider or team in charge of care
- Coordinate both visit specific and overall health care needs
- Insure patient involvement in decisions about care
- Meet physical comfort needs
- Provide timely and appropriate pharmacy services
- Provide timely and appropriate pharmacy services
- Provide a smooth transition between inpatient and outpatient care

- Rate overall VA health care

Questions on the SHEP are organized into subsections, allowing for feedback regarding several different dimensions. These sections categorize feedback regarding recent visits, scheduling appointments, registration, and efficacy of care, and an overall impression of the most recent visit. The survey also requests feedback for clinic visits during the previous two months, including specialist clinics, pharmacy use, and an overall impression of the VA clinic system. SHEP concludes with 38 items related to demographics and patient health.

Responses to items in these subsections permit analyzing perceptions of care leading to specific initiatives to improve care quality. Despite this tool's potential to support continuous improvements in care, its length markedly exceeds the scope of items on surveys used at CG clinics. The number of items may thwart efforts to implement a similar survey within the CG's system. Clinic administrators (personal communication, December 2007), conceded that the length of patient satisfaction questionnaires is limited by CG operational commanders, as there is a perception of survey fatigue. In addition, since the CG clinic administrators conduct analyses by hand, a 107-question survey would not be supported by current resource allocation.

Complementing the lengthy SHEP survey is the VA's "quick card" approach. The survey may be completed during a clinic

visit or on-line. Results may be used for immediate quality improvement. The VA estimates that patients can complete the survey in approximately five minutes. The "quick card" form contains eight questions that query the courtesy of the staff, the timeliness of service, confidence in the provider, respect for patient privacy, staff sensitivity to patient concerns, cleanliness of the facility, health information, and overall patient satisfaction (Department of Veterans Affairs, n.d.). This survey also includes a section for comments and suggestions, but no demographic data are collected.

Consequently, many current MHS and VA initiatives have been linked mandates by Congress. Often cited is the 1993 National Defense Authorization Act, which requires that the armed services adopt a formal system to assess patient satisfaction. Unfortunately, the meaning of a formal evaluation has never been defined. Since then however, MHS and the VA have adopted system-wide tools. In the MHS and VA scores of these system wide tools have been linked to strategic intent, financial incentives, quality awards, and whose results are benchmarked among facilities (Fortney, Borowsky, & Chapko, 1999; MHS Medical Manual, 2006).

Facilities external to military care have also transitioned their patient satisfaction policies to standard patient evaluations within their organizations; two such entities are the

National Committee for Quality Assurance and the Agency for Healthcare Research and Quality. Policies of both organizations support the marketing and benchmarking of findings organizational-wide surveys. Even though the transparency of scores has not yet been associated with affecting consumer choice, Hibbard, Stockard, and Tusler (2003) assert the transparency of scores has proven beneficial, stating that a desire to enhance reputations drives improvement efforts. Researchers also provide strong evidence that the marketing of quality measurements stimulates quality improvement activities, thus facilities that withhold results limit quality improvement efforts (Hibbard, Stockard, & Tusler).

Policy Options

The purpose of this study was to conduct a policy assessment of the evaluation of patient satisfaction within the CG. This analysis determined what an effective evaluation process should consist of. In addition, the comparative results of this analysis supports a policy shift for the CG. Expanding the scope of evaluating patient satisfaction through the standardization of metrics by employing a visit-specific survey uniformly through out the organization is recommended. A standard survey that assists local clinic operations in identifying quality improvements, but also supports strategic management of the CG health care system as a whole should be the desired end state.

Specifically, the current policy (Option 1) was evaluated against a Web-based survey designed in-house by the CG (Option 2) and a standard survey and analysis process established by the American Medical Group Association (Option 3). Policy Options 2 and 3 proposed the implementation of a standard survey capable of evaluating patient care uniformly. Ratings of patient satisfaction collected from a standard patient survey and process encourage benchmarking among CG clinics. Bogan & English (1994) define *benchmarking* as the "systematic process of searching for best practices, innovative ideas, and highly effective operating procedures that lead to superior performance" (p. 1). Results assessed from a standard survey may also support an organizational metric that could be linked to strategic management efforts.

Option 1 - Status Quo

Option 1, Status Quo, reflects the current CG policy. Present CG policy empowers clinic administrators to assess patient satisfaction with minimal oversight from the organization. A review of 13 of the 42 clinic surveys and interviews with the clinic administrators were conducted to establish a baseline of patient satisfaction practices within the CG. Clinic surveys evaluated were visit-specific surveys, thus questions directed patients to evaluate care of the most recent visit.

All clinics reported internal survey administration. The preponderance of clinics, 11 in all, query patient satisfaction by administering a paper-and-pencil survey; telephone or mailed surveys were not used. In addition to the paper-and-pencil survey, 2 of the 11 clinics also provided an electronic survey via the Internet to receive patient feedback throughout the year.

The two remaining clinics use electronic surveys, wherein patients received a survey via e-mail following their visits. This survey delivery method, used in both locations, was initiated by a clinic administrator using Dynamic Surveys, a software program available to all CG units. Dynamic Surveys supports an automatic analysis of feedback, thus enabling the

administrator to conduct surveys monthly, a frequency that exceeds the CG standard and the norm.

Option 2 - CG Designed Survey Web Interface

The next option assessed, *Option 2, CG Designed Survey Web Interface*, considered a survey instrument designed internally by the CG to address organizational needs. Specifically, a CG developed survey would evaluate medical, dental, and pharmacy services concurrently. An in-house designed survey must be developed by a project manager under the guidance of medical command headquarters. A senior headquarters representative would be responsible for allocating resources and providing authorization for proposals submitted. The project manager would coordinate an issue-specific workshop which would involve 8-12 subject matter experts meeting for a three-day conference. The purpose of the conference would be to establish vision, identify survey content and form, develop an implementation plan, and construct policy. Attendees would review current CG norms and best practices in order to develop a path forward.

The uniform survey to be developed is expected to be reflective of current practices in the CG, and specific to CG health care delivery needs. The expected uniform survey would consist of a Web-based interface and would be limited to 15-25 category response questions, including demographics, and complemented by an open-ended comments section.

The inclusion of sections that allow verbatim comments is validated by Press's (2006) description, "Comments written by patients are essentially the simplest, most direct and universally comprehensible pieces of data on the survey. Comments can be invaluable" (p. 101). Although verbatim questions require content analysis, their inclusion constitutes an important survey element, as open-ended responses add qualitative element to quantitative scoring methods (White, 1999).

Survey distribution to be developed would be accomplished through the use of e-mail, as facilitated by Design Surveys. Using the software system to distribute a uniform survey is beneficial, as it reduces data entry and internal analyses, and supports benchmarking of scores among CG clinics. Currently, two CG clinics employ Design Surveys to evaluate patient satisfaction, as stated previously.

Pilot testing establishes survey validity and reliability, though this testing is expected to be minimal. Due to limited resources within the CG, it is not standard CG policy to test in-house management tools against established scientific standards.

The flexibility of having the CG determine the content of the survey and its format is a plus. Design flexibility comes at a cost; the development and implementation of *Option 2* is projected to cost substantially more than the other options. However, Web-based distribution that supports automatic analyses

is expected to constitute the lowest annual survey costs of all three options.

Option 3 - AMGA Survey

Option 3, the American Medical Group Association (AMGA) Survey, proposes implementation of the AMGA patient satisfaction survey. The AMGA uses VSQ-9, an evidence-based survey tool created by the RAND Corporation as the basis for its *Patient Satisfaction Benchmarking Program*. The AMGA survey form does not permit unsolicited comments, but AMGA encourages clinic staff members to instruct respondents to write comments on the back of the surveys (Appendix A). Since verbatim responses are used in *Option 1, Status Quo*, and projected to be incorporated in Option *2, CG Design Survey Web Interface*, the evaluation of *Option 3* may include the evaluation of written responses.

Surveys are distributed to patients at the clinic by staff members. Respondents return the surveys through drop boxes, a common practice in many CG clinics. Surveys are then collected and sent to AMGA, which scans responses to create a database for analysis.

Surveys are analyzed during the first part of the month and reports are returned to a medical facility within 30 days. According to information on the AMGA website (www.amga.org), the survey program analyzes the performance of each clinic site as well as individual providers. The program also provides

graphical comparisons to regions and specialty-specific norms. This information should help identify "best practice" benchmarks, and increase opportunities to target quality improvements. The AMGA benchmarking program offers eight survey periods throughout the year; however, the CG is expected to evaluate clinics only twice per year.

Evaluative Criteria

A scorecard that evaluated the strengths and weaknesses of the three policy options was created. This approach, where strengths and weaknesses were determined, promoted comparisons, and enabled the consideration of impacts that cannot be expressed in quantitative terms (Ruchelman, 1984). Implementation costs, operating costs, and opportunity costs were determined and presented in the scorecard. Also, the different options were evaluated against set criteria to determine the best solution for the CG.

Criteria was established to evaluate the policies. Selecting criteria was subjective, but was based on research and benchmarking of external policies. Drain and Clark (2006) note that surveys are processes that combine steps, both iterative and interdependent; i.e., decisions made at one point of the survey design affect subsequent steps of the survey process. This point substantiates the assertion that a policy must direct all steps in the process. Because of this interdependency between steps, outcomes must be evaluated throughout the policy analysis in order to determine the best option.

This study used the survey process, which is conceptually defined in five phases: design, distribution, retrieval, analysis, and application of results, as the foundation for the criteria analysis. This high level process was derived from Aday and Cornelius text *Designing and Conducting Health Surveys* (2006). The five high-level phases presented in Figure 1. depicts visibly the inside workings of a process, captures types of decisions being made, and identifies possible measurement points (Montgomery, 2002). Aligned with the five phases of the process, the criteria which was evaluated is presented. Reasoning for selecting the desired dimensions is supported in the following text.

Figure 3. Patient satisfaction survey process flowchart.

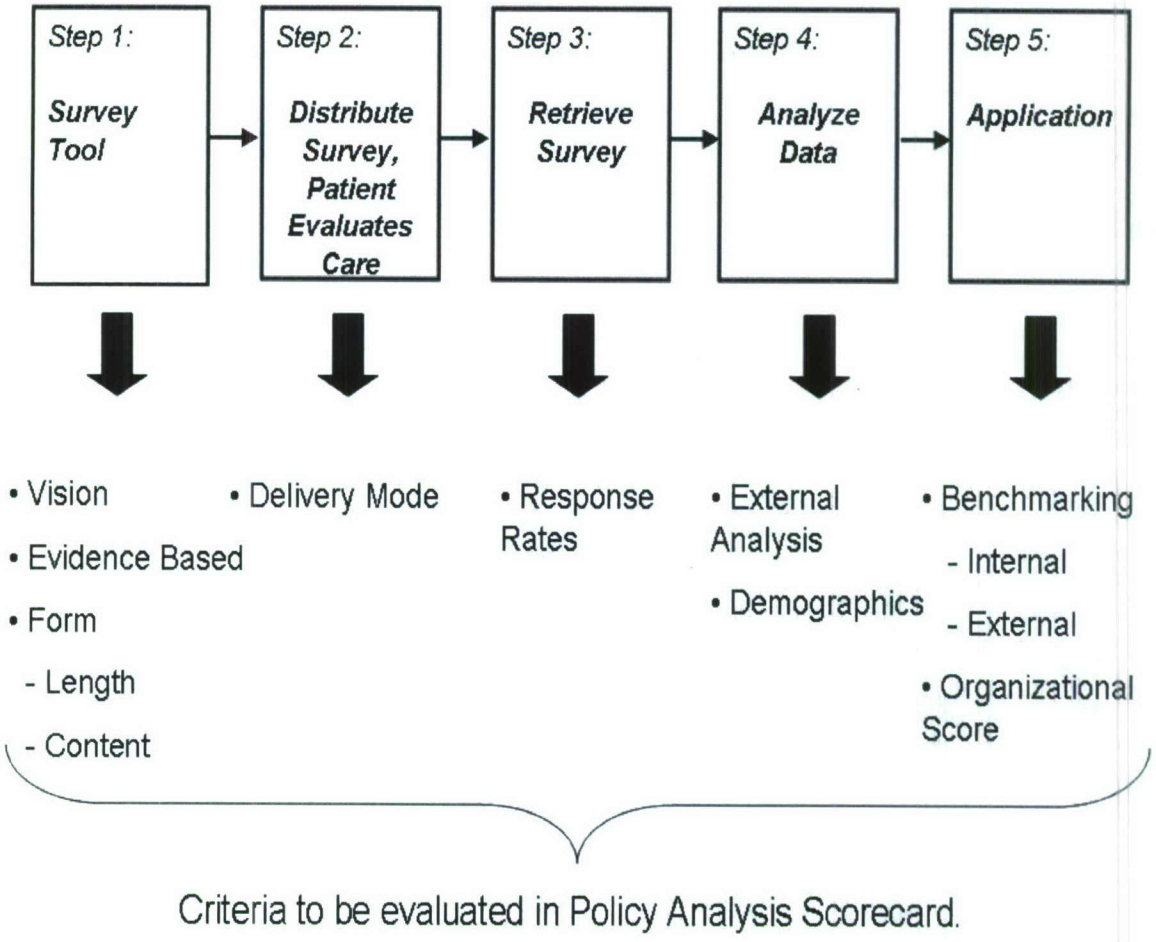


Figure 3. This conceptual flowchart for patient satisfaction survey process is presented in relation to dimensions evaluated in the policy review. The flowchart is derived from *Designing and Conducting Health Survey* text authored by Aday and Cornelius (2006).

Step 1: Develop Survey Tool

For this policy review, the criteria for Step 1, *Develop Survey Tool*, includes, an assessment of each option's vision, evidence based content, process, and length. According to Aday and Cornelius (2006) and Drain and Clark (2004), identifying the purpose for conducting a patient satisfaction survey program is essential in designing an effective survey. Aday and Cornelius assert that the topic of interest should be clearly identified first because the information being sought should determine the appropriate question format.

Establishing the vision should align with the strategic intent of the tool and should determine whether a survey should evaluate visit-specific feedback, or evaluate care provided over a period of time. To receive immediate feedback on a recent visit, many organizations administer a short questionnaire on-site following an appointment; the VA Quick Card is an example of this type of evaluation tool. The use of a visit-specific survey is supported by literature (Drain & Clark, 2004; White 1999). Lengthy and complex surveys negatively affect response rates and data quality. Research findings conclude that low response rates diminish the survey's internal validity (Aday & Cornelius, 2006; Drain & Clark, 2004; White, 1999).

After the purpose of assessing patient satisfaction is identified, the format of survey items should be determined. Ransom, Joshi, and Nash (2004) recommended that the length of a survey item be limited to 20 words, but Aday and Cornelius (2006)

posit that longer sentences provide the patient ample time to assess the information in support of a more precise analysis. Andrews (1984) and Bradburn, Sudman, and Wansink (2004) support the conclusion of Aday and Cornelius, noting that abbreviated questions may lead to carelessness. Since there are countering arguments as to what constitutes the appropriate length, the number of questions were assessed in order to determine expected response times and predict CG commander's willingness to adopt the policy. Response times are also known to affect response rates and will be discussed later in this section (White, 1999).

The inclusion of sections that allow verbatim comments was also assessed, as supported by the literature (Press, 2006). Although verbatim questions are not easy to tabulate, their inclusion constitutes an important survey element. Open-ended responses assist in understanding conditions behind the score (White, 1999).

Whether the policy option incorporated evidence-based survey methods was assessed. Poorly written or untested questions, inadequate design, or the lack of psychometric testing may lead to inaccurate responses (Aday & Cornelius, 2006; Jackson & Kroenke, 1997). Improvements associated with surveys that lack validity may be negligible (Jackson & Kroenke, 1997; Rubin, 1997). In addition, the IOM calls for the increased use of evidence-based practices to improve the efficiency of health care (2001).

Step 2: Distribute Survey

Distribute Survey, Step 2, is defined by the criteria delivery mode. Handwritten, mail, telephone, and electronic surveys are examples of delivery processes that have been used to glean patient satisfaction. A reliable and effective process for assessing patient satisfaction requires standardizing distribution because the methods employed may affect outcomes (Aday & Cornelius, 2006; Drain & Clark, 2004; Ransom, Joshi & Nash, 2006; White, 1999). Because patients sometimes have difficulty recalling precise details, Ransom, Joshi, and Nash (2006) recommend surveying an ambulatory patient immediately following an episode of care. In addition, the method of distribution should be consistent (White, 1999). This policy review reviewed the mode of delivery of each policy in order to determine the level of standardization.

Step 3 - Retrieve Survey

Step 3, *Retrieve Survey*, is closely associated to Step 2. The policy review of survey retrieval assessed the application of response rates. Response rates are important because higher response rates support a survey's validity (Drain & Clark, 2004; Landon & Normand, 2006). Response rates, however, are difficult to manage, especially among small practices. Subsequently, a policy that sets standards for acceptability, calculates response rates, and garners supported from clinic staff was also evaluated.

Step 4 - Analyze Data

Once the data has been retrieved, Step 4, Analyze Data, occurs. White (1999) posits that analyzing data may be the most

complex part of the survey process, and voices concern that a lack of strong analytic skills that surveys inhibits data analysis. Jackson and Kroenke (1997), note that results of patient satisfaction analyses are often stifled by internal evaluation, due to the potential for bias. The GAO (1998) also report impartiality concerns over internal evaluations of patient satisfaction. White (1999) states that outside data analysis generally ranges from $300-$400 per provider for small physician practices; therefore, conducting surveys in-house could be more cost effective. The opportunity cost of accomplishing the analysis in house as well as the cost investment of supporting the each policy's analysis methodology was assessed.

In addition to the impact of impartiality during analysis, biases of respondents should also be assessed. The collection of demographic data may help identify how certain patients respond to particular questions and determine whether subgroup differences exist (Aday & Cornelius, 2006; White, 1999). Collection of demographic data and sub-group analysis was also evaluated.

Step 5 - Application

Application, Step 5, evaluated the utility of outcomes. Griffith and White (2002) state that utility exists when surveys are "...sufficiently detailed to identify correctable

characteristics" (p. 36). Because internal benchmarking may improve replication of best practices and advance the implementation of change, whether the policy supported facility metrics and local improvement initiatives was evaluated. A comparable score from a validated survey tool is essential in developing and reporting results to external stakeholders (Hibbard, Stockard, & Tusler, 2003). So the ability to externally benchmark scores was also evaluated.

Policy Analysis

A cost analysis, criteria evaluation, and trade-off analysis was used to compare the three policy options. The cost analysis was split into two segments, implementation costs and operating costs. Implementation costs consisted of the expected cost associated with shifting the architecture and survey process from *Option 1, Status Quo*. Operating costs, annual recurring costs, were defined as the expected expense of distributing and retrieving the survey, as well as the expenses associated with analyzing and applying survey results.

Evaluating criteria was achieved using a scorecard, to include a matrix of the desired attributes, as presented in the *Evaluative Criteria* section of this report (p. 34-42). The cost analysis, discussed and presented first, is followed by the scorecard, which includes a summary of the cost analysis and the criteria evaluation. The results section discusses potential

trade-offs, through an analysis of strengths and weaknesses of each policy option. Furthermore, opportunity costs are acknowledged and considered. Recommendations and policy selection conclude this section.

Cost Analysis Constructs

The cost analysis held some basic constructs constant to ensure the policies analyzed were comparative. First, the frequency of surveys needed to be established. In order to define *Status Quo, Option 1*, 13 of the 42 CG clinics were contacted and the frequency survey distribution was determined. Results indicated that the average distribution was just over twice per annum (CG Clinic Administrators, personal communication, December, 2006). Thus, a semiannual survey frequency was established for all three options.

A human resources cost analysis was derived using a common analysis template employed by resource managers at DOD MTFs (LT Suzanne Wood, personal communication, September, 2007). Subject matter experts at TRICARE South Regional Office confirmed template results as representative of costs associated with CG manpower expenditures (Mr. Dave Montplaiser, personal correspondence, TRICARE Business Analyst, September 2007) Subsequently, a fifty dollar hourly resource estimate was determined and verified by CG Headquarters (LT Timothy Kulzer, personal communication, September 2007).

Implementation Cost Analysis

No implementation costs were estimated for Option 1, Status Quo, because under this policy no change in doctrine was expected. Operating costs and opportunity costs are associated with *Option 1* and will be addressed in the following section.

A majority of the costs for *Option 2, CG Designed Survey Web Interface,* would be incurred in the development and implementation phases of the survey. The process proposed for designing a survey and developing policy included the assignment of a senior headquarters representative and a project manager. In addition, to gain buy-in and validate survey content, a patient satisfaction conference was proposed. Costs for the event were estimated to be approximately $30,000 and would require 400 resource hours (See Table 1). An additional 480 hours was projected for policy implementation and survey testing. A total of 2560 resource hours were expected to be associated with the conference, development and implementation processes. In sum, total implementation costs were projected to be $163,000 ([2,560*$50] + $30,000 = $163,000). Implementation cost estimates for *Option 2* were validated by CG Headquarters (LT Timothy Kulzer, personal communication, September 2007).

Option 3, AMGA Survey, implementation costs were estimated using AMGA Fee Schedule published on its Website (www.amga.org). Estimates included costs associated with policy development and

implementation. CG medical command was expected to pilot test the AMGA Survey prior to implementing the policy throughout the organization. The AMGA fee was estimated at $2,870 with an additional $5,000 for 100 resource hours allocated to pilot testing, for a total of $7,870 (See Table 1). Policy development and dissemination of processes was projected to be 1,960 resource hours. In sum, total implementation costs were projected to be $105,870 ([2,060*$50] + $2,870 = $105,870). Implementation cost estimates for *Option 3* were validated by CG Headquarters (LT Timothy Kulzer, personal communication, September 2007).

Table 1. Design and Implementation Costs

	Option 1 Status Quo	Option 2 CG Designed Web Interface	Option 3 AMGA Survey
Design and Test Survey	No Cost because clinics have individual surveys in place	Conference Costs = $30,000 Conference Resource Costs = $20,000 Test Resource Costs = $5,000 Total = $55,000	Design = No Cost AMGA Fee = $ 2,870 Test Resource Costs = $ 5,000 Total = $ 7,870
Policy Shift	No Cost because clinics have individual surveys in place	Policy development = $ 24,000 Dissemination = $ 84,000 Total = $108,000	Policy development = $14,000 Dissemination = $84,000 Total = $98,000
Total	$0	$163,000	$105,870

Adopting *Option 2, CG Designed Survey Web Interface*, or *Option 3, AMGA Survey*, required the CG to invest resources to develop survey methods and processes. *Option 2, CG Designed Survey Web Interface*, required the CG to design a survey in-house and was estimated at $163,000. *Option 3, AMGA Survey*, at $105,870 was projected to cost a third less than *Option 2*. The estimated costs of implementing new policy, presented in Table 1 were validated by CG headquarters command (LT Timothy Kulzer, personal communication, September 2007). This $50,000 difference resulted from designing a survey in-house using a conference format.

Two divergent possibilities may minimize the cost difference between Opt*ion 2* and *Option 3*. First, the CG

customized survey could be designed without a conference; however, this would delay policy development and increase dissemination costs. Second, the possibility exists that the CG could benchmark against a standardized survey in Web format and eliminate the design aspect associated with *Option 2*. Adopting a standard survey using the Design Survey tool would reduce estimated costs, thus aligning *Option 2* with *Option 3*, totaling just over $100,000.

Operating Cost Analysis

Following the implementation cost analysis the annual recurring costs, or operating costs, for each option was evaluated. Once again, the $50 estimate per resource hour was used. Correspondence with Clinic Administrators established the basis for operating estimates (CG Clinic Administrators, personal correspondence, December 2006). *Option 1, Status Quo*, served as benchmark for resource hour expenditures per activity:

- One week survey period
- One resource hour a day distributing surveys
- One resource hour a day retrieving surveys
- 16 resource hours per survey period analyzing results
- 4 resource hours per survey applying results.

Option 1, Status Quo, was marked by variation in clinic processes that prohibited systemic comparisons of resource

consumption. Estimates for *Option 1* were based on an average survey distribution and retrieval cycle for 42 clinics, and was estimated at ten hours per survey, 840 hours annually (See Table 2). Clinic-based analyses were estimated at 16 hours per survey period, or approximately 1344 hours annually. Application of results through quality improvement efforts, defined as reporting scores to the patient advocacy committee, was estimated at 4 hours per survey, or 336 hours annually. In sum, total annual operating costs were projected to be $126,000 ([840*$50] + [1344*$50] + [1336*$50] = $126,000). Annual operating cost estimates for *Option 1* were validated by CG Headquarters (LT Timothy Kulzer, personal communication, September 2007). Within *Option 1, Status Quo,* there were no costs associated with results being applied strategically, because the current process lacked standardization and prohibited cross-validation of metrics.

In determining operating costs for *Option 2, CG Designed Survey Web Interface*, no additional fees associated with software were expected, as Design Surveys was previously funded. Collecting and retrieving data under *Option 2* would reduce resource hours and was projected to be 5 hours per cycle, or approximately 420 hours annually (See Table 2). The Web interface included an automated analysis tool that would reduce analysis to 2 hours per cycle, or approximately 168 hours

annually. Application of results through quality improvement efforts, defined as reporting scores to the patient advocacy committee, was estimated at 4 hours per survey, or 336 hours annually. However, strategic management of the process and application of the results required an increase of 80 resource hours in external benchmarking. In sum, total annual operating costs were projected to be $50,200 ([420*$50] + [168*$50] + [336*$50] + [80*$50] = $50,200). Annual operating cost estimates for *Option 2* were validated by CG Headquarters (LT Timothy Kulzer, personal communication, September 2007).

Operating costs for *Option 3* were developed by incorporating the cost to participate in the AMGA Survey program with the cost of CG resource hours. Recurring external fees were calculated for 250 providers at an estimated cost of $17,625 annually (See Table 2). Under *Option 3*, collecting and retrieving data resource hour consumption increased and was projected to be 15 hours per cycle, or approximately 630 hours annually. This increase existed because AMGA required a 3-week cycle to ensure an adequate number of surveys were collected for each provider. The *AMGA Survey* program included analysis support; however, comment section analysis would remain the responsibility of the CG clinic, estimated at 4 hours per cycle, or approximately 336 hours annually. Similar to option 2, there was an expected need for increased management involvement.

Strategic management of the process and application of the results required an increase 80 resource hours in external benchmarking. In sum, total annual operating costs for *Option 3, AMGA Survey*, were projected to be $114,625 ($17,625 + [630*$50] + [336*$50] + [336*$50] + [80*$50] = $114,625). Annual operating cost estimates for *Option 3* were validated by CG Headquarters (LT Timothy Kulzer, personal communication, September 2007).

Table 2. Operating Costs.

	Option 1 Status Quo	Option 2 CG Designed Survey Web Interface	Option 3 AMGA Survey
Distribute and Retrieve Survey	Resource Costs = $42,000	Resource Costs = $21,000	AMGA Membership Fee and Processing Fees for 250 providers = $17,625 Resource Costs = $63,000 Total = $80,625
Analyze Survey	Resource Costs = $67,200	Resource Costs = $8,400	Resource Costs = $16,800
Clinic Application of Survey Results	Resource Costs = $16,800	Resource Costs = $16,800	Resource Costs = $16,800
Coast Guard Wide Application of Survey Results	No Cost, because it can not be done under current policy.	Resource Costs = $4000	Resource Costs = $4000
Total	$126,000	$50,200	$114,625

The review of annual operating expenses showed that the most economically feasible alternative was *Option 2, CG Designed Survey Web Interface*, estimated at just over $50,000 a year. Differences in option costs resulted from the implementation of technology. Specifically, the use of a Web interface, which minimizes distribution and retrieval while automating analysis, reduced resource hour investments associated with *Option 2*. Additional savings associated with *Option 2* were anticipated because the policy proposes to use a software program, Design Surveys, which is already available to the CG clinics.

Option 3, AMGA Survey ($114,625), and *Option 1, Status Quo* ($126,000), were estimated to be comparable. However, *Option 3, AMGA Survey*, required annual fees estimated at $18,000. Additional budget allocations may be questioned, as current patient satisfaction evaluation processes were devoid of external expenditures.

Criteria Analysis

The *Criteria Analysis* is presented in a scorecard that includes a matrix with options presented in relation to desired attributes (see Table 3). Included in the scorecard are the estimated implementation costs per cycle (from Table 1) as well as a project cost per clinic survey derived from Operating Costs (see Table 2). The desired criteria used in the scorecard was

presented graphically in Figure 3, p. 37, and discussed in depth in the *Evaluative Criteria* section (p 34. - p 42.)

Option 1, Status Quo, was defined by evaluating clinic surveys and questioning clinic administrators; 13 of the 42 clinics were evaluated. The mean number of questions for CG surveys sampled was 17.2, with 6 questions being shortest and 40 questions being the longest (Table 3). Most clinics included at least one verbatim response question on their surveys.

A review of the questions from all 13 clinics found that 4 clinics did not request feedback on overall patient satisfaction. The remaining nine clinics assessed overall patient satisfaction in four distinct ways:

- Overall rate visit
- Overall rate clinic
- Would you recommend provider
- Would you recommend facility

Administrators who favored the use of patient satisfaction surveys directly linked change initiatives to verbatim comments related by topic, not patient satisfaction scores. The clinic administrators interviewed were asked how many times a year their clinics surveyed patients. A majority, 8 of the 13 clinics exceeded the annual requirement to survey. Clinics that surveyed more frequently utilized processing tools like Excel or Design Surveys to automate analyses.

Option 1, Status Quo, empowered each clinic to implement there own survey process, preventing internal as well as external benchmarking. Only 1 of the 13 clinics implemented an evidence-based tool. Also, current processes rarely evaluated response rates or analyzed demographic information; thus, the validity of the current patient satisfaction scoring program for CG was unreliable. With no ability to discern an organizational patient satisfaction score, the question remained: At an estimated annual operating cost of $1500 per survey per clinic, does the cost of the current CG patient satisfaction program outweigh the benefit?

Option 2, CG Designed Survey Web Interface, supported internal benchmarking and organizational measures, while providing the CG the flexibility in determining the form and content of an organizational survey (see Table 3). The low cost of sending surveys and survey reminders was a technology plus. Additionally, analyses were automated and errors in uploading and analyzing data were reduced.

However, there were a number of detractors for *Option 2, CG Designed Survey Web Interface*. First, the survey would not be valid due to a lack of psychometric testing. Second, an organization-specific design prohibited external benchmarking. The third concern was with the distribution method of the survey, as only a small percentage of clinics in the CG, 2 of

13, queried patients by sending electronic surveys to patients. With the pencil-paper method overwhelmingly implemented in the CG, an electronic survey method may affect survey participation, quality of responses, and validity of scores (OMB, 2006). In 2006 the Office of Management and Budget (OMB) reported that paper surveys typically achieve higher response rates than web surveys or email surveys. OMB also posited that low response rates may result from respondents' concerns over confidentiality.

Electronic surveys have not achieved broad-based implementation because a perception exists that distributing surveys electronically could prevent a certain segment of population from responding, biasing results (Aday & Cornelius, 2006; OMB, 2006). This is not a perceived detractor of introducing an electronic survey to evaluate patient satisfaction in the CG, as a majority of respondents are CG active duty members; all CG members are provided access to computers and are considered proficient in basic computer use.

Option 3, AMGA Survey, queried patients using a pencil-paper survey method, similar to current practices, Status Quo; however, it employed an evidence-based tool whose results were calculated externally to the organization (see Table 3). Using a tested, validated, standardized tool that supported internal and external benchmarking of clinics, as well as providers,

increased the utility and application of results. The *AMGA Survey* program allowed an organization to customize 3 questions, affording the CG limited flexibility in aligning the survey to particular CG wants and needs.

Remaining with a pencil-paper approach did not embrace technology, and detractors may perceive it as rudimentary in design. Other concerns included AMGA policy which encouraged survey distribution over a three-week period, which is longer than current practice (one week). As results were aggregated by provider, some providers may balk at additional oversight.

Table 3. Policy Analysis Scorecard.

	Option 1 Status Quo	Option 2 CG Designed Web Interface	Option 3 AMGA Survey
Implementation Costs	None	$163,000	$105,870
Clinic Operating Costs Per Cycle	$1,500	$598	$1,365
Number of Questions	6 to 40	15 to 25	15 to 18
Ability to Change Questions	Yes	Yes	No*
Evidence Based Metrics	No	No	Yes
Survey Delivery Mode	In person	Web	In person
Computed Response Rates	No	No	Yes
Automated External Analysis of Responses	No**	Yes	Yes
Demographics	No	TBD	Yes
Benchmark Internally	No	Yes	Yes
Benchmark Externally	No	No	Yes
Strategic Intent Metrics	No	Yes	Yes

* AMGA allowed 3 questions to be customized.

** A few of the CG Clinic surveys were Web-based incorporating external analysis; however, a majority of CG clinic required CG administrator to analyze results internally.

Recommendations

The current method, *Option 1*, Status Quo, at a cost $1500 is not evidence-based and results remain limited in application. Op*tion 2, CG Designed Survey Web Interface*, incurs substantial implementation costs, and results prevent external application of metrics. *Option 3, AMGA Survey*, is the best policy. Using the AMGA Survey program provides the CG a uniform, evidence-based tool that is distributed in accordance with current practices. Also, external examination reduces internal analyses and improves validity by decreasing bias. Adopting *Option 3* would provide survey results that allow for internal and external benchmarking, delineates provider-specific metrics, as well as provides a foundation for organizational metrics. At a cost of $1,365 per survey per clinic, the AMGA costs less than the current process (Option 1). Although the operating cost estimate for *Option 3, AMGA Survey* ($1,365), is more than *Option 2, CG Designed Survey Web Interface* ($598), the intangible benefits outweigh expenditures.

Conclusions

Mission requirements of the CG have increased the demand for health care. Literature supports the evaluation of patient satisfaction as a well-documented impetus for initiating measures to improve the quality of health care (Aday & Cornelius, 2006; Griffith & White, 2002; Press, 2006; Ransom, Joshi, & Nash,

2005). The CG, however, lacks a quality, evidenced-based system, for measuring how demands and service changes affect patient perceptions.

This study provides an analysis of how the CG currently evaluates patient satisfaction throughout the organization. Findings determined how the CG evaluates patient satisfaction is inefficient and ineffective, as many opportunities exist to improve the evaluation processes. Unfortunately, an ineffective patient satisfaction system limits the quality of patient care (IOM, 2006; Press, 2006), thus a more effective system for assessing patient satisfaction is needed.

The use of a standard rating system provides structure and, in accordance with Donabedien (1998), structure is the foundation for improving the quality of care. This report concludes that standardization within the CG evaluation system should be a priority, as standard structure supports quality outcomes. Quality outcomes are the foundation for benchmarking; benchmarking is a management tool that increases the institutions ability to adapt to rapid change and adopt improvements, thus supports a continuous improvement environment (Bogan & English, 1994). In addition, adopting a standard survey that assesses patient satisfaction similarly in all CG clinics, allows for system-wide evaluations, laying the groundwork for

metrics that could be used to measure effectiveness, leverage resources, and increase financial support.

Study results pertain to patient satisfaction evaluations conducted in CG clinics; however, a significant percentage of CG patient care occurs externally. A visit-specific survey standardized and distributed evenly at CG clinics fulfills only some of the needs of the CG health care system. Thus, considering the complexity of the CG's care model, this report's findings are limited. The CG must improve the clinic evaluation process and advance the monitoring of patient perceptions for those seeking care externally. A systems approach, to include internal and external care evaluations, is ideal.

In adopting policy to standardize patient satisfaction evaluations, the CG must review the application of results. Determining how the scores will be used in both operational and strategic settings should be identified and conveyed to stakeholders. Additionally, communicating how survey results will be applied to clinic practice and budget planning must also be addressed.

Furthermore, adopting a new survey must be accompanied by quality assurance efforts, as in addressing maintenance of the patient satisfaction feedback process. Awareness of competitive trends in surveying patient perceptions should be sought. This recommendation is reinforced by actions of the TRICARE

Management Activity (TMA), the governmental office that overseas MHS operations. TMA chartered a working group in 2006 to facilitate the efficient and effective development of MHS surveys. The CG should draw on this resource in developing and maintaining current evaluation practices.

Accompanying support within the organization is acknowledged. Admiral Allen (2007), the Commandant of the CG, issued ten "Commandant Intent Action Orders" to focus strategic efforts. Standardizing CG patient satisfaction system aligns with several of the action orders including

- Realign the Coast Guard's logistics organization to reduce the burden on our field units, control costs and improve accountability.
- Develop a new operational framework for the Coast Guard to execute our missions more effectively and efficiently. (p.2-3)

In summary, patient satisfaction evaluation is just one of many management tools that can be standardized within CG health care. Since high patient satisfaction is a predictor of high quality care, improving this feedback mechanism could be an impetus for affecting decision making constructs throughout the CG health care system.

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